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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,648	04/19/2006	Robert Stoiber	CE11457EP	8182
22917	7590	05/21/2009		
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			EXAMINER JUNG, MIN	
			ART UNIT 2416	PAPER NUMBER
			NOTIFICATION DATE 05/21/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

Office Action Summary	Application No. 10/576,648	Applicant(s) STOIBER ET AL.	
	Examiner Min Jung	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 8 and 9, at line 2, respectively, "...scheme is selected is...." is vague and indefinite. It seems that the first occurrence of "is" should be deleted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 7-9, 11, 12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Budka et al., US 2003/0198312 (Budka).

Budka discloses link adaptation in general packet radio service networks.

Regarding claim 1 of the present invention, Budka teaches a method for selecting a cell-

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based channel coding scheme in a packet control unit, from a plurality of channel coding schemes, for use in initiating communication with a subscriber unit in a cell of a wireless communication system, the method comprising the steps of : selecting the cell-based channel coding scheme that was previously used for communication with at least that subscriber unit in the cell, and communicating with that subscriber unit using the selected cell-based channel coding scheme (Budka teaches at the end of a Temporary Block Flow (TBF), the Packet Control Unit (PCU) will store the values of the coding scheme currently in use. The cached values will be used for subsequent TBFs. See [0093]).

Regarding claims 2-5, Budka teaches recording the channel coding scheme used for communication with at least a proportion of subscriber units in the cell (the values of coding scheme used is stored, [0093]), recording the channel coding scheme used for each block of data in communications with subscriber units (there are a plurality of Temporary Block Flows (TBFs), and each block of data read on each TBF, [0092]), recording the channel coding scheme in use at the end of a communication with a subscriber unit ([0093]), and selecting the cell-based channel coding scheme based on the recorded data ([0094]).

Regarding claims 7-9, Budka teaches separately selecting an uplink cell-based channel coding scheme and a down link cell-based channel coding scheme wherein the uplink cell-based channel coding scheme selected is dependent on information relating to channel coding schemes used for uplink communications from subscriber units in the cell, and the downlink cell-based channel coding scheme selected is dependent on

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information relating to channel coding schemes used for downlink communications to subscriber units in the cell ([0024], [0025], and [0095]).

Regarding claims 11-12, Budka teaches recording a final coding scheme used for a communication with a subscriber unit, and using the final channel coding scheme instead of the cell-based channel coding scheme for initiating a communication with the subscriber unit within a predetermined period from the finish of the previous communication ([0093] and [0094]), and altering the channel coding scheme during the communication based on radio condition information (revising the decision on the coding scheme selected as the channel quality changes, [0025]).

Regarding claim 14, Budka teaches a packet control unit (PCU 18) comprising a processor for selecting a cell-based channel coding scheme, from a plurality of channel coding schemes, for use in initiating communications with a subscriber unit in a cell of a wireless communication system wherein the processor selects the cell-based channel coding scheme that was previously used for communication with at least that subscriber unit in the cell for communicating with the subscriber unit (Budka teaches at the end of a Temporary Block Flow (TBF), the Packet Control Unit (PCU) will store the values of the coding scheme currently in use. The cached values will be used for subsequent TBFs. See [0093]. Budka also teaches PCU 18 which includes processing function and which performs the link adaptation methodology of his teaching [0024]. Therefore, a processor is inherent within the teaching.), and a memory for storing the channel coding schemes previously used for communication with subscriber units in the cell (Budka teaches PCU

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storing/caching the channel coding schemes for subsequent use [0093]. Therefore, a memory is inherent within the teaching).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budka.

Regarding claim 6, Budka fails to specifically teach selecting a channel coding scheme based on the channel coding scheme most commonly used in communication with subscriber units in the cell. However, Budka teaches coding scheme selection regarding different aspects and condition of the network. See [0101] – [0112]. One example at [0109] provides discussion of eliminating CS3 and CS4 when the condition cannot support anything weaker than CS2. Thus, Budka's teaching provides insights into making the coding scheme selection based on the activity and condition of the network. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to select most commonly used coding scheme based on the statistics from the network activity stored in the PCU.

Regarding claim 10, Budka fails to specifically teach the determining step for determining that the initiation of a communication using the cell-selected channel coding

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scheme is unsuccessful. However, Budka teaches the selecting step which selects a more robust channel coding scheme. Budka teaches that a more robust channel coding scheme is selected when the time interval between blocks transferred is longer than a certain period because in such cases, it is more likely that the initiation of communication will experience failure due to changed channel conditions. See [0097] and [0098]. With this teaching at hand, it would have been obvious for one of ordinary skill in the art at the time of the invention to instead try initiating with the cached channel coding scheme and then select a more robust code when the first attempt fails, because Budka's teaching is to avoid such scenario, which also means that such scenario has been contemplated and has been eliminated for higher success rate at the first attempt.

Response to Arguments

7. Applicant's arguments with respect to claims 1-12 and 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Western PG Pub., and the Olofsson patent are cited for further references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127.

The examiner can normally be reached on Monday through Friday 9:00 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Min Jung/
Primary Examiner, Art Unit 2416